Appln. Serial No. 10/657,519 Amendment Dated January 19, 2005 Reply to Office Action Mailed November 2, 2004

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

On page 3, amend paragraph [0009], as follows:

One of the magnetic films 22 and 26 has a fixed orientation of magnetization [0009] (reference layer) while the other has a non-fixed orientation of magnetization (data layer). The one of the magnetic films 22 and 26 having a non-fixed orientation of magnetization is the active magnetic film of the magnetic storage cell 10. The data layer rotates its orientation of magnetization in response to electrical signals applied to the conductor set 20 and 28 during write operations to the magnetic storage cell 10. Current can be driven on conductor 20 in a first direction and 28 in a second direction to orient the magnetization of the data layer 22 in this illustration. In this example, the current I_1 in conductor 20 may be flowing perpendicular to the page from the back side to the front side of the page, generating field H₁. The current I₂ in conductor 28 may be flowing from left to right, producing a magnetic field H₂ perpendicular to the page in the vicinity of magnetic films 22 and 26. The combination of H₁ and H₂ magnetic fields acting on the data layer is sufficient to set its magnetic orientation, whereas exposure to either H₁ or H₂ fields alone should not alter the magnetic orientation of the data layer. The magnetic orientation is depicted as a left to right arrow M1 in Fig. 2A. To reverse the orientation of the magnetization on magnetic film 22, the current on conductor 20) would be driven in the opposite direction, producing field H₁, as shown in Fig. 2B. The reversed orientation is depicted as a right to left arrow M1 in Fig. 2B. In one embodiment, a first logic state of the data bit stored in the magnetic storage cell 10 is indicated when M1 and M2 are parallel, such as in Fig. 2B, and a second logic state is indicated when M1 and M2 are anti-parallel, such as in Fig. 2A.